

Weatherization Rises to the Top in Kansas

The nation's largest natural gas field, Hugoton, lies under the southwestern corner of Kansas. This key resource fuels Kansas' economy and produces many important by-products, such as helium. Despite this ready supply of energy, many Kansans struggle to pay their energy bills and keep their homes warm. Low-income families are particularly vulnerable to rising energy costs. Kansas partners with the U.S. Department of Energy's (DOE) Weatherization Assistance Program (Weatherization) to reduce energy costs for low-income households by increasing the energy efficiency of their homes, while ensuring their health and safety.

Low-income households typically spend 14% of their total annual income on energy, compared with 3.5% for other households. Rising energy prices compound this burden. Low-income families often cut back on other necessities to pay their energy bills.

Willa Miller*, an elderly widow from Hartford, struggled with this burden when her winter energy bills escalated from a manageable \$78 in October 2000, to \$300 in December 2000. Weatherization measures provide a long-term solution for low-income Kansans like Willa. Increasing the energy efficiency of a low-income home reduces the household's total energy costs and provides a long-term boost to the family's budget. Families can use the energy cost savings for other necessities, such as groceries, medicine, and clothing.

ADVANCED TECHNOLOGIES ELEVATE RESULTS

Kansas is the nation's top producer of helium, a product that is distilled from natural gas and valued for its buoyant properties. When a helium-filled balloon is released outdoors, the gas lifts the balloon to new heights. Though Weatherization began as a basic conservation program in the 1970s, it has consistently integrated new technologies and advanced techniques to raise energy savings and increase efficiency.

NATIONAL WEATHERIZATION PROGRAM

Homes weatherized in 1999	68,000
DOE allocations in 1999	\$135 million
Average annual energy cost savings per household	\$300
Average space heating savings	25-30%
Energy benefits returned for every \$1 invested	\$2.10
Jobs supported	7,000

KANSAS

Homes weatherized in 1999 (with DOE \$)	631
DOE funding in 1999	\$1.5 million
Clients served in 1999	2,639
Elderly	17%
People with disabilities	15%
Families with children	42%

Kansas' Department of Commerce and Housing administers the Weatherization Program and eight local agencies deliver services to eligible residents in every county. Weatherization crews use computerized energy audits and advanced diagnostic equipment, such as the blower door and digital manometer, to determine the most cost-effective measures appropriate for each home. Crews also test heating units and appliances for carbon monoxide and gas leaks.

Typical weatherization services for single-family and mobile homes include installing insulation; sealing and balancing ducts; tuning and repairing furnaces; and mitigating heat loss through windows, doors, and other infiltration points. Kansas has weatherized more than 58,000 homes since the inception of the program.

Kansas has taken an active role in training and certifying Home Energy Raters (HERS) and Housing Quality Standards (HQS) inspectors. Several local agencies have become certified and they use these credentials to coordinate weatherization services with federal and local housing programs. Certified Weatherization-HQS inspectors contract with the Department of Housing and Urban Development's (HUD) First Time Homebuyers and Homeowner Rehabilitation programs. Certified HERS inspectors approve the energy efficiency aspects of Low Income Housing Tax Credit projects. These alliances raise Weatherization's profile in the community, expand the technical capabilities of the Weatherization network, and make publicly funded housing projects more energy-efficient.

A NEEDED LIFT

Weatherization measures provide an important economic boost for low-income households. Cathy Timmons* could no longer afford to heat her Topeka home due to spiraling energy prices. After Community Action, Inc., insulated and air-sealed her house, Cathy saw her December 2000 heating bill drop below the previous year's bill. Considering the simultaneous increase in energy prices, Cathy's savings dramatically illustrate Weatherization's impact on a family's budget.

Weatherization crews also safeguard the health and safety of the families they serve. Harvest America, a local weatherization agency, helped a family in extreme financial distress. The father had recently lost his job after a fire at the local plant and the family lived in a frigid mobile home. A physical therapist that visited the home to help their disabled daughter remarked, "...it was so cold, we would

not remove our coats and gloves... We could see our breath." The crew installed insulation, sealed major air leaks, replaced broken windows, and installed a new furnace. After weatherization, the therapist noted, "The family has benefited tremendously."

Weatherization reduces energy costs for low-income families and helps them to become more self-sufficient.



Kansas provided extensive weatherization services for these Ottawa homeowners, including replacing a faulty furnace that was leaking carbon monoxide.

This benefits the community by keeping dollars in the local economy that would typically be exported out to pay for energy. Reducing residential energy demand also decreases electricity generation and associated power plant emissions, a significant source of air pollution. This improves local air quality and reduces adverse health effects, particularly asthma.

WEATHERIZATION WORKS!

Weatherization produces an impressive range of benefits for low-income households and communities in Kansas. Nationally, for every \$1 invested in the program, Weatherization returns \$2.10 in energy-related benefits. Weatherization reduces national energy consumption and curbs demand for imported oil. Weatherization works for Kansas and America!

*Names have been changed to protect the privacy of the subjects.



TO LEARN MORE ABOUT THE WEATHERIZATION ASSISTANCE PROGRAM, CONTACT:

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Visit the Weatherization Web site at: www.eren.doe.gov/buildings/weatherization_assistance
or call the Energy Efficiency and Renewable Energy Clearinghouse at: 1-800-DOE-3732



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